Shiv Vyas

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LinkedIn | Portfolio | GitHub

EDUCATION

M. S. Computer Science — *Graduated: May 2021*

Florida Institute of Technology, Melbourne, Florida — *Cumulative GPA: 3.7*

- Teaching Assistant: Programming in Python - taught Python programming & Linux to 100+ sophomores.
- Semi-Automated Grading System - Reduced grading time by 60% & nearly eliminated all human error by deploying automated grading scripts on the server; utilized Unix, Python & Bash.

B. E. Computer Engineering — *Graduated: July 2019*

Gujarat Technological University — *Cumulative GPA : 3.6*

SKILLS

Programming: Python, C, C++, Java, HTML, CSS, JavaScript, SQL, Linux, Bash Scripting

Machine Learning: Pandas, Pytorch, Keras, Polars, LSTM, CNN, RNN, Time-Series Modeling, AutoML, Hyperopt

Analytics : Matplotlib, Plotly

Miscellaneous: Data Science(Pipeline - Cleansing, wrangling, visualization, modeling, deploying, interpretation), Docker, Git, Kubernetes, Cloud Computing, Azure IoT Hub, IoT Edge, Databases, Databricks

PROFESSIONAL EXPERIENCE

Johnson & Johnson (Tata Consultancy Services) — *Aug 2022 – Present | Raritan, NJ*

IoT Engineer / Architect

- Developed an IoT solution for J&J's warehouse, using ML and edge-based human detection algorithms. Improved space utilization by 35% and reduced inventory management time by 20%.
- Implemented a GxP-compliant edge architecture, connecting 100+ medical instruments to J&J's Wi-Fi. Enhanced data contextualization, reporting, workflow, and search capabilities across multiple sites.
- Led the development of an automated video recording system using computer vision. Enabled QR code and gesture-triggered recording with speech-to-text subtitles, reducing manual editing by 70% and increasing portability.

Data Science

- Directed the development of J&J's proprietary anomaly detector for vibration sensors placed across various J&J's manufacturing sites to predict machine malfunctions.
- Developed an LSTM-based anomaly detection system for vibration sensors, achieving 80% accuracy and reducing machine downtime by 15%.

Software Engineer

- Built analytics systems with Databricks, Spark, and Azure to process over 18M IoT data points in 6 minutes, resolving data gaps and boosting processing speed by 60%.
- Automated over 40 testing scripts for Embedded-C SDK using pytest, enhancing pipeline efficiency by 25%.

Florida Institute of Technology | Research Assistant — *Jun 2021 – Feb 2022 | Melbourne, FL*

- Applied machine learning to satellite imagery, modeling future glacial changes for NSF global climate policy.
- Processed 150,000+ L&SAT-2 images using neural networks, converting them into actionable data.

Engage AI & Florida Institute of Technology | Data Engineer — *Dec 2020 - Jun 2021 | Melbourne, FL*

- Built a platform using Python & Firebase to help nations achieve UN Sustainable Development Goals.
- Scraped & compiled 1.5M+ data points from the UN, IMF, and World Bank, developing a UI for efficient data analysis.

Renesas Electronics Americas | Business Analyst Intern — May 2020 – Aug 2020 | Palm Bay, FL

• Facilitated the integration of two company acquisitions into Renesas' digital ecosystem by leading comprehensive gap analysis, programming, and testing of the RORE platform. This integration resulted in a 40% reduction in order processing time and a 60% decrease in training cost.

• Managed data consolidation from Oracle, SAP, and NetSuite using Model N, enhancing enterprise-wide collaboration.

Scudo Systems LLP | Co-Founder — *Jan 2017 – Jul 2019 | Ahmedabad, IND*

- Designed an affordable vehicle security system under $80, securing Top-5 in 2017 Start-Up India Yatra.
- Raised 1.2M INR in funding, growing market penetration by 20% and retaining 5% ownership after exiting.